

Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford (RL-0040)

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A-30 Borehole

Overview

This section addresses Project Baseline Summary (PBS) RL-0040, *Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford*. There are three major components to this work scope:

- Deactivation & Decommissioning (D&D) [R. E. Wilkinson],
- Waste Sites Remediation [B. H. Ford], and
- Reliability Projects [R. G. Slocum].

NOTE: Unless otherwise noted, all information contained herein is as of the end of March 2008.

Notable Accomplishments

Deactivation and Decommissioning

231-Z Inventory Reduction

- The Pacific Northwest National Laboratory (PNNL) issued the final Non-Destructive Assay (NDA) report on March 19, 2008.
- Documented Safety Analysis (DSA) update is proceeding.
- Shipping container design calculations were received and are being reviewed for approval.

BC Control Area

- The BC Control Area (BCCA) Engineering Evaluation/Cost (EE/CA) 30-day public review was completed on March 25, 2008.
- The historical/cultural review for the BCCA haul road upgrade and trailer/waste queue, undergoing public review, closed on April 14, 2008.
- The historical/cultural and biological/ecological review for Zone A of the BCCA field walk down was initiated on April 7, 2008. The report will be submitted for public review following completion of the field investigation.
- The ecological and biological review report for the BCCA haul road upgrades and trailer/waste queue was completed on March 28, 2008, and supports planned field work through April 15, 2009.

Waste Site Remediation

- Completed BC Crib Treatability Test Decision Draft for Phase I treatability testing.
- Completed second of three BC Crib electrical resistivity correlation (ERC) boreholes; third borehole is 95 percent complete.
- Issued Sanitary Waste Landfill Closure Plan for internal review.
- Resolved 200-IS-1 Sampling Analysis Plan (SAP) comment dispute.
- Transmitted the 200-PW-2/4 and 200-TW-2 Site Specific Sampling Plans to RL and the Washington State Department of Ecology (Ecology).

Reliability Projects

- Completed Project L-606, *Refurbishment of Rattlesnake Road*, functional design criteria on March 19, 2008. The conceptual design report, cultural resource review, and National Energy Policy Act (NEPA) activities are on hold pending RL direction.
- Awarded contract for Project L-641, *273-E (Fleet) Building Safety Enhancements*.
- Completed development of DOE Order 430.1B, *Real Property Asset Management*, Corrective Action Plan and Analysis Report for Other Structures and Facilities (OSF) on March 14, 2008, and submitted a preliminary draft of the Ten-Year Site Plan to DOE-HQ on March 28, 2008.
- Completed quarterly update of 2005 Energy Policy Ten Mitigation Plans on March 30, 2008.
- Completed L-631, *Restoring Reliability to Hanford Central Plateau Water Supply*, Mission Needs document on March 20, 2008.

Issues

Waste Site Remediation

- Tri-Party Agreement (TPA) Milestones M-15-49A and M-15-49B for 200-MG-1 and 200-MG-2 Feasibility Studies are not achievable due to a change in key assumptions that were the bases for the milestone dates. The U.S. Environmental Protection Agency's (EPA's) position that insufficient data for risk analyses would preclude issuance of the Record of Decision make these milestones unachievable. An alternate regulatory pathway is under negotiation; TPA change packages have been processed.

FY 2008 Funds vs. Spend Forecast (\$M)

	Projected FY 2008 Funding	FY 2008 Fiscal Year Spending Forecast	Variance
RL-0040 Nuclear Facility D&D, Remainder of Hanford	\$ 86.8	\$ 83.7	\$ 3.1

Schedule/Cost Performance (\$M)

Nuclear Facility D&D, Remainder of Hanford	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion (FY08/ CTD)
Current Period (Month)	\$3.7	\$6.4	\$4.0	\$2.7	74.4%	\$2.3	36.7%	\$77.2
Cumulative-to-Date (FY 2004-Present)	\$283.2	\$277.0	\$273.0	-\$6.2	-2.2%	\$4.0	1.5%	\$332.8

Numbers are rounded to the nearest \$0.1M.

CTD Schedule Performance (-\$6.2M/-2.2%):

The unfavorable schedule variance (SV) for the D&D Project organization (-\$1.5M) is due to:

- Delays in the UW-1 Record of Decision (ROD) (-\$1.3M), which have also caused delays in the Treatability Test and RAWP scope. BCR RL40-CP08-001 has been submitted to RL for approval.
- Delays in preparing the work packages for REDOX EF-2 fan repairs due to lack of critical resources (-\$0.2M).

The unfavorable SV for Waste Site Remediation (-\$4.2M) is due to regulator delays in approving documents required to initiate waste site characterization field activities.

The unfavorable SV for Reliability Projects (-\$0.4M) is within established thresholds.

CTD Cost Performance (+\$4.0M/+1.5%):

- The favorable cost variance (CV) for D&D (+\$3.0M) is primarily due to the following:
- Prior year cost overruns in 200-UW-1 U Zone Waste Site Remediation (-\$4.9M) resulting from:
 - Additional direct push sampling during field investigation to determine contamination levels.
 - Greater than planned effort to resolve Feasibility Study/Planning Package (FS/PP) comments and Remedial Design Sampling Analysis Plan (SAP).

Schedule/Cost Performance (\$M), continued

CTD Cost Performance (+\$4.0M/+1.5%):

- The favorable cost variance (CV) for D&D (+\$3.0M) is primarily due to the following:
- Prior year cost overruns in 200-UW-1 U Zone Waste Site Remediation (-\$4.9M) resulting from:
 - Additional direct push sampling during field investigation to determine contamination levels.
 - Greater than planned effort to resolve Feasibility Study/Planning Package (FS/PP) comments and Remedial Design SAP.
 - Delays in barrier construction without reductions in staffing levels.
 - Lateral spread of contamination at 200-W-42, resulting in more waste containers being shipped to the Environmental Restoration Disposal Facility (ERDF) than planned.
- Prior year efficiencies in Surveillance and Maintenance (S&M) staff resulting from not replacing budgeted staff, and loaned labor to higher priority projects within D&D. Also due to lower than planned corrective maintenance in prior years (+\$3.1M). Prior and current year variance distributions (passbacks) (\$4.9M).

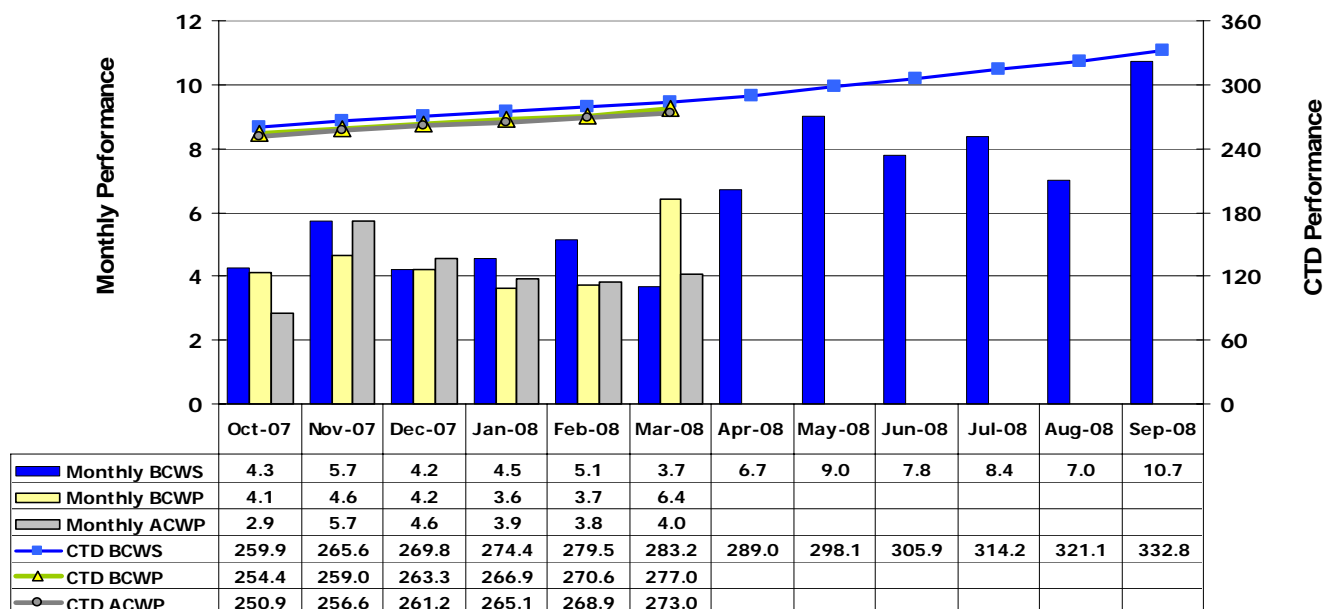
The favorable CV for Waste Site Remediation (\$0.2M) is insignificant.

The favorable CV for Reliability Projects (+\$0.3M) is primarily due to the following:

- Efficiencies and favorable bids in prior year electrical projects (+\$1.5M), road refurbishments (+\$0.7M), capital equipment procurements (+\$1.0M), Real Estate and Site Planning (+\$0.3M), and Project L-429, *12-Inch Water Line Mortar Lining Along 4th Street from Baltimore to Canton*, (+\$0.5M).
- Offset by increase in steel prices for prior year facility and water projects (-\$3.2M), and prior year telecommunication projects technology deployment (-\$0.5M).

The favorable CV for Closure Services (+\$0.5M) is within established thresholds.

Performance Analysis CTD and Monthly (\$M)



Milestone Achievement

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The FY 2008 Enforceable Agreement milestone information provided herein is based upon the current baseline including RL-approved changes. Changes from month-to-month in both the total number of milestones to be completed and in the forecast status of upcoming milestones are the result of BCRs approved during the reporting period.

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
CPDD-07-004	212-N nuclear facility hazard reduction and downgrade completed	RL	11/30/07	10/25/07		Complete
M-091-40L-016	M-91-40L.4.D Quarterly Burial Ground vent/substrate sampling results (1st Qtr 2008)	HQ	12/15/07	11/21/07		Complete
CPDD-07-008	Complete Construction of Project L-626, 100B-A Water System Enhancement	RL	12/31/07	12/11/07		Complete
M-091-40L-017	M-91-40L.5.A Quarterly Burial Ground vent/substrate sampling results (2nd Qtr 2008)	HQ	3/15/08	2/25/08		Complete
CPDD-07-0010	Complete phase one of the BC Cribs and Trenches Treatability Test Plan	RL	3/30/08	3/28/08		Complete
CPDD-08-001	241-U-361 Settling Tank Characterization and Sampling completed	RL	3/31/08	3/4/08		Complete
M-091-40L-018	M-91-40L.5.B Quarterly Burial Ground vent/substrate sampling results (3rd Qtr 2008)	HQ	6/15/08		6/15/08	On schedule
CPDD-08-004	Complete phase 2a of the BC Cribs and Trenches Treatability Test Plan	RL	7/31/08		7/31/08	On schedule
M-15-40D	Submit Revised Feasibility Study Report and Revised Proposed Plan for the 200-CW-5 OU	HQ	7/31/08		7/31/08	On schedule
M-091-40L-019	M-91-40L.5.C Quarterly Burial Ground vent/substrate sampling results (4th Qtr 2008)	HQ	9/15/08		9/15/08	On schedule
CPDD-08-003	Complete characterization of potential contamination plume in the BC Cribs and Trenches	RL	9/30/08		9/30/08	On schedule
CPDD-08-006	Complete 231Z nuclear facility hazard reduction	RL	9/30/08		8/27/08	Ahead of schedule
CPDD-08-011	Excavate 20,000 tons of contaminated Soil at BC Control Area	RL	9/30/08		9/9/08	Ahead of schedule